

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-19. (Canceled).

20. (New) A method of vapor phase growth with reduced slip dislocation frequency, comprising:

providing a silicon single crystal substrate of 300 mm or more, the substrate having a main surface and a rear surface;

selecting a susceptor having only

a heat treated body section formed of graphite and coated with silicon carbide (SiC), wherein after heat treatment the body section is warped along its longitudinal length in an inverted U-shape;

a pocket formed on the susceptor, the susceptor pocket having an outer peripheral side part which is capable of supporting the rear surface of the silicon single crystal substrate and an inner peripheral side part defining a bottom surface which is kept in a state of being more recessed than the outer peripheral side part in an inside of the outer peripheral side part;

the pocket having an initial maximum depth D defined between the bottom surface of the inner peripheral side part in the pocket and a plane defining the location of the rear surface of the silicon single crystal substrate when mounted on the outer peripheral side part over the pocket, and after the heat treatment having a reduced pocket depth $(D - \beta)$ that has been reduced due to the inverted U-shape warping by warping amount β to be less than 0.4 mm;

mounting the silicon single crystal substrate on the outer peripheral side part of the susceptor over the pocket; and

performing a vapor phase growth of a silicon epitaxial layer on the main surface of the substrate with reduced slip dislocation frequency by maintaining the maximum depth to be less than 0.4 mm.

21. (New) The method as claimed in claim 20, wherein

the susceptor is a type of a single wafer, and

a curvature on a rear surface side of the susceptor is $1.75 \times 10^{-5} \text{ mm}^{-1}$ or less.